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Role of Blockchain in Financial Inclusion through Microfinance

- Dr. N. B. Shaikh
Associate Professor and Head of Business Economics, M.M.C.C. Pune.

Abstract:

Microfinance is an effective medium of financial inclusion. Blockchain can serve as a valuable tool to enhance the efficacy of microfinance. This article will brings out the role of blockchain technology in financial inclusion.

Key words: Microfinance, financial inclusion, microfinance, blockchain

Introduction: Financial exclusion among a vast section of people especially in poor and developing countries is a veritable roadblock to achievement of sustainable global peace. The poor suffer from financial exclusion for myriad reasons. The conventional banking and financial institutions are yet to completely address the issue of financial exclusion due to reasons such as feasibility of operations, institutional bottlenecks, etc. Technology can play an important role in financial inclusion in an effective and transparent manner. In this context blockchain can play an important role in achieving financial inclusion among the poor and disadvantaged sections of the society.

Blockchain: A Technological Wonder

Blockchain is truly a technological wonder of the contemporary world. It may be defined as a group of blocks which have been tied in chain with cryptgraphic hashes. All the blocks with the exception of the first one has the hash of the previous block. Satoshi Nakamoto is credited with the invention of blockchain technology. He brought out his invention through a publication in a paper on Bitcoin in 2008 titled

"Bitcoin: A peer to peer Electronic Cash System" The technology of blockchain is based on a decentralized data base which exists in various computers and every copy of these data base is similar. The architecture of blockchain can be divided into three layers – Applications, Decentralized Ledger and Peer to peer network. The various types of block chain are: public blockchains, private blockchains, semi private blockchains, sidechains, permissioned ledger,

distributed ledger, shared ledger, fully private of proprietary blockchains, tokenized blockchains and tokenless blockchains.

Significant Benefits of Blockchain:

1. **Trust:**

Blockchain technology operates in a decentralized manner. The blockchain ledger adds new information only when majority of the network participants give their consent after being satisfied about the truthfulness of the cryptographic information. The information is authenticated quickly and updated information is put into the blockchain ledger.

2. **Immutability and Transparency:**

Blockchain technology provides robust protection of data as the data once entered cannot be modified. Moreover, there is high level of transparency as any change made in the ledger can be audited and made accessible to all those who are part of the network.

3. **Disintermediation:**

The blockchain technology results in disintermediation due to the decentralized nature of the blockchain ledger (database). Two parties can communicate without the intervention of any central intermediary to attest the truthfulness of the records.

4. **Disintermediation:**

An important benefit provided by the blockchain technology is that it results in cost savings besides speeding up the transactions. It also does away with the presence of intermediation and the need to audit transactions by commission thereby increasing the speed of transactions.

Microfinance and Financial Inclusion:

Microfinance is the provision of microcredit or loan of small amounts to the poor, marginal and unbanked sections of people who have no access to credit by the conventional banking system. Microfinance plays an important role in financial inclusion as findings from various parts of the world

especially the poor and developing countries bears testimony to it. However, the concept of modern day microfinance, which originated in Bangladesh in the 1970s and successfully emulated elsewhere, is facing serious challenges which has dented its role in providing financial inclusion to the poor. The efficacy of microfinance as a tool of empowerment is under serious challenge as vindicated by the Andhra Pradesh microfinance crisis of 2010 and Assam microfinance borrower debt crisis. Today, the microfinance sector, due to the imperatives of commercialization, is experiencing several problems. The concept of microfinance was mooted to make credit available to those who are unbanked so that they could enjoy financial inclusion besides being the empowered individuals of the society. However, blatant commercialization has led to the mission drift of microfinance and its role in financial inclusion is being seriously questioned. Microfinance institutions have to make microcredit available to large sections of people thereby leading to high interest rate. Moreover, due to the high level of illiteracy prevalent among the loan recipients and lack of collateral resulting the problem of maintaining effective control over the credit delivery process. Lethargy in the KYC process and high transaction charges are also considered as serious problems of microfinance.

Financial Inclusion: Role of Blockchain:

Blockchain technology can play an important role in enhancing financial inclusion through microfinance. Undoubtedly, the efficacy of microfinance due to unregulated commercialization and laxity in regulations is under serious threat. However, blockchain can provide solutions to many of the teething problems that contemporary microfinance sector faces. The advantages of blockchain technology such as decentralized ledger (data base), speed, transparency, security can be a boon to bail out the microfinance sector from its contemporary perils. Lack of proper regulations and transparency in transactions are the key reasons behind frauds and scams in the microfinance sector. Such issues can be successfully addressed by blockchain which can enhance the speed of the KYC process through digital identity besides streamlining the processes with high level of efficiency.

Challennges:

Blockchain technology is yet to be fully tested. Some significant limitations of blockchain are its complexity and complicacy besides being expensive. Therefore, its application in the microfinance sector is fraught with challenges. The recipients of microcredit are poor, semiliterate and illiterate people. They would find operating such a complex technology a herculean task. Moreover, the expensive nature of blockchain can detract the microfinance institutions from using it. Therefore, the practical hindrances in using blockchain in the microfinance sector will result in a negative attitude in its adoption by the stakeholders.

Conclusion:

The microfinance sector is facing a serious threat due to issues of transparency, security and malpractices. Therefore, blockchain can help redeem microfinance its role as facilitator of financial inclusion among the poor. Despite the practical challenges that exist in adopting this technology, undoubtedly, blockchain can offer meaningful solutions to bail out microfinance from its present crisis.

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